

Human 5-HT1A promoter

-3438ATCATCAATAATCCGTTATAAAGCTTGTCTTTCTTTAGGTTAACTTTAGAGGCCCTTGAAGAATAAGAGCTCATCTCTT
-3358TACAGGAGCTTTGGTTTGCAGCATTTACTTAAGAAATATTTGGTATCTCTGTATCTTTAAGAGTTAAACATAGAAGAATTG
-3278GCTAAGTGAAAAATGAATGAACGCAATATCATCTCTGCATATATCATTTATATATATACAGTATTTAGTTTAAAG
-3198TTAAACATAAATATCTATTTATGYCAITGSACGAYTAGGYSAACTARTCRGTGCTGCGAATACTTTTCGATACTTCTGTGTTT
-3118CCCTCCTAGTATTCATAAAGTGTGCCCTTTGAAGAAACGTTTAAATTTGTAAGAAATAAAATGTTTGATATATTTATGTATATTA
-3038TTACTAAGAAAAAACTTGAATTACTTTGGATTTTGAAAAAATTTGATAAAATCTTACATAAAATCTACATAGCATATTTGAAGCAAGAAT
-2958AACAAATGCTATACCTCAGGAATATTAATTCAGATTTTACAGCAATTTTAACTTTCTTGATGAGAAAAATAAATTTGTCT
-2878AGTTATTAACATATTTGGATCCCAAGATGAAGCAGAAATCTTAACATAATTTATTTGATTTATTTGTGATTTTACATA
-2798TTTACATGTGTGTTTGACACAAATCTTAATATGTTCTTGATATGCATATATTTGCTTCTTAAATTTTAAAGTTTCCCTTT
-2718ATTTTACTTTGTTTATAGTCTCAACTATAAATTTCAAGTTTAAATTTTAGATAATTCAGCCCTTTTAAATATTTTCCCATTA
-2638TAATTTTGTGACCTCTAACTCTATTTTAACTGTAAATATAGTTCTGTATTTGTGAAGAGACTTTAGAAGTGGAAATAGA
-2558TACCTTCACAAATCTTAAAGACTTCTTCAGAGTCTGTAAACAGCATTAACCATGTATATCTTCTTTCTTTTGCATGCC
-2478ATGATCATCAATGCATGGCTCATGTGGTGCAATGCTGAATGATGTGGGACTGTGCCAGCTGAACATAAAAAAAA
-2398AAAAACAAACAAACCTTATCCAAACACACTGTCTGTATTTGTAATGCAATTTGGCCCAACTGGATTTCTTTTGATGCTTTGG
-2318TGAATTGCTCTTTTGTGTTGGGCTTGGAGAATTCAGAGCTATGAATTTAGAGCTCAGATTTGAACACAATATTAAGATTAT
-2238TGCAATCTGTAGTGAATCTGTTCATGTTATCCAGTGTCAACTGCTTTTGAGATTGCATTTCTTTTCACTCAGGCATGCAA

FIGURE 1a BEST AVAILABLE COPY

Title of Invention: "MUTATIONS OF THE 5' REGION OF THE HUMAN 5-HT1A GENE, ASSOCIATED PROTEINS OF THE 5' REGION ... DIAGNOSTIC TEST FOR MAJOR DEPRESSION AND RELATED MENTAL ILLNESSES"

Inventor's Name: ALBERT et al.

Serial No. 09/430,412

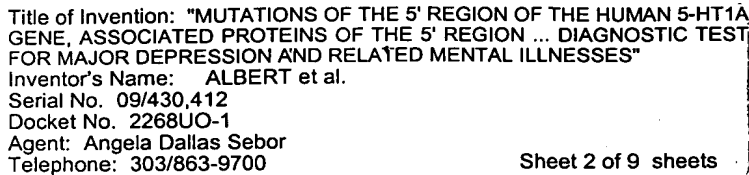
Docket No. 2268UO-1

Agent: Angela Dallas Sebor

Telephone: 303/863-9700

Sheet 1 of 9 sheets





-2158TCAGGATGTATAAGTGAAATGTTGTGTGATGTTTACTGTAGTTGCTTAGAAGTCCATTCTTTACCAATGCTCAAATGT
-2078GATTAAATTTGTTTCTTGTAAAGGAAACAGCTTAGAACAAACCCCTTGTAAGTATCTTTATTTTCAGTGATTTAAACATTT
-1998CCAAATGTTAAATCATTTGGAAAATGCAATACTATTCCGTTTCTCCAACAAAAGGTAAATTTATGTTCAGTTCCAAAAGTTCA
-1918GGTTATGACAGCACAAAACCAACACACAGGTGAAAGTTAGCCTAGCTTTTATTAATAATGGCATTTCCCAGTTAGAACTTTGTG
-1838AATGACAGATACTTCAGGCTTTTGAAGGAAGCTAAACATATAATAGGCCTGATATATAAGGTTTCAGAGCAAAAGAGGGGC
-1758ACTAAAAATAAATTTTAAAGAAAATAGGAAGGAGACAAAACCTCAATACTACCTTGTCTTTTAAATACTGTCTTCTCTCTTT
-1678CTAAAAGTTGTTGTATTTTCTCAATACTTGTCTTCAATTTCTGGCATAAGGGTTTCCAGATGGCACTCTAAAAACATTTGGCCA
-1598GAAGGTGGGGAACATAAAACCTCATTTGCTTAGAACTGTCCCAGGTGCTGAACCCAGTTTCTGAGATTAAGAGAGGCTAGC
-1518CGGCTAGCGAACCCGGGATTCACCAAGTTTCCCCCAGAGGTTTGCAGGCTCTGGTAAGAAGTGCAAAAAGGCCATGTGAAAA
-1438TGCCAGGCTTCACTTAGAACACATATGCAAAAATAATTTCCATCCCTGAATTTACTAGCCACAAAGCTATGGGAAGTGGCAG
-1358TGTCACTGAAATTACAAGTGTAGTAGTGATGGAAAAGTGTGTGTGTTTAGAATATATATCACACTGAGTTTGTGTTCTT
-1278CATTTTCGAGATGCAGTTGTTTACCTCTCCTGTGTCCTTTTGACAGTCTCTTATATAATTTTCGTTCTCTCCCGGTTCCCCAACG
-1198TTAAAAAAAAGTCACAGGCAATATTTCTCCTGAGGGAGTAAGGCTGGACTGTTAGATGATAACGGAGGTACCGTTTGT
-1118TGTTGTTGTCGTTGTTGTTGTTTGGAGACGGAGTCTCGCTCTGTGCCCCAGGCTGGAGTGCAATGGCGCGGAGA
-1038ACGGAGGTAGCTTTTAAAAAACGAAGACACACTCGGTCTTCTTCCATCAATTAGCAATAATTTGGGAGACTGACCCAGGAC
-958TGTTCACTTCCCATTTCAGGCTCCCTATGCTTCTCTTTTCTCATCTCCTATTGCCACTCTGGGATGCTGACACGATTTTAAAG
-878AATTTGGCAGATAATATGAGGCAAGGAGTAGTTGGAAATTCCTCTCCCCCAAGTTTTCCAACCCCAAGTTTTCCTGGGTGG
-798AGCGGGAGTTTATTTGTTACAAACCTTGGTCTGACCGGCAGGATCTGGTGTGTAAAGTGAGTTCTGAGTCTCTGTGTGACA
-718AAAAGAGACTCGAATGCAAAAGACGTGAGCTAGAGGGAGAGGGGGGGGCCAGAGGAAAGAGGCCACTCTCTCGGGGT

FIGURE 1b



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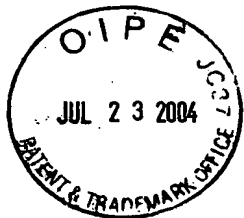
Sheet 3 of 9 sheets

-558AGGGAAGTGAGGAGGAAGAGGGGAGACTGAAAGGGAAGGCAGGTGGGGAGAGGGGGACGAAAGAGGCGAGAGAGAGAGAA
-478GAGAGGAGGAGAGGGGGAGAGAGGGAAGGAATAGGGAGAGGAGGGTCAACAGAGTGACCCGTGAGGATGGGGCT

-398TCTCG

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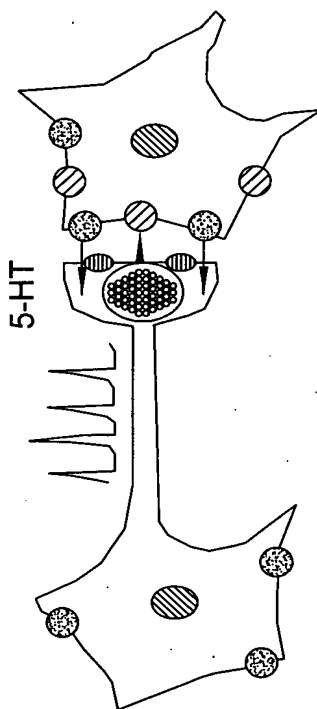
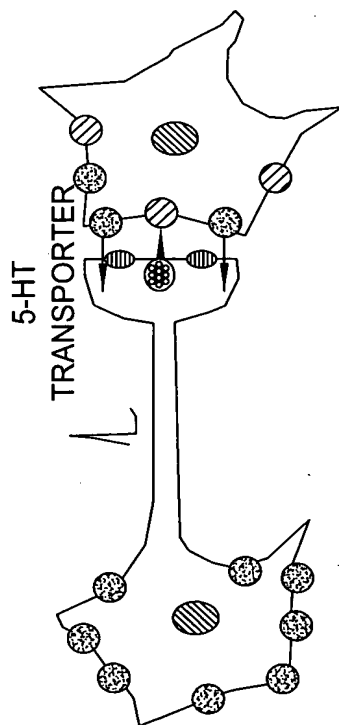
FIGURE 1c



CHRONIC ANTIDEPRESSANT TREATMENT

ACUTE ANTIDEPRESSANT TREATMENT

5-HT NEURON POSTSYNAPTIC NEURON



5-HT1A AUTORECEPTOR POSTSYNAPTIC RECEPTORS

AUTO-INHIBITION → LOW FIRING RATE →
→ LOW 5-HT RELEASE

DYSINHIBITION → NORMAL FIRING RATE →
→ HIGH 5-HT RELEASE

FIG. 2

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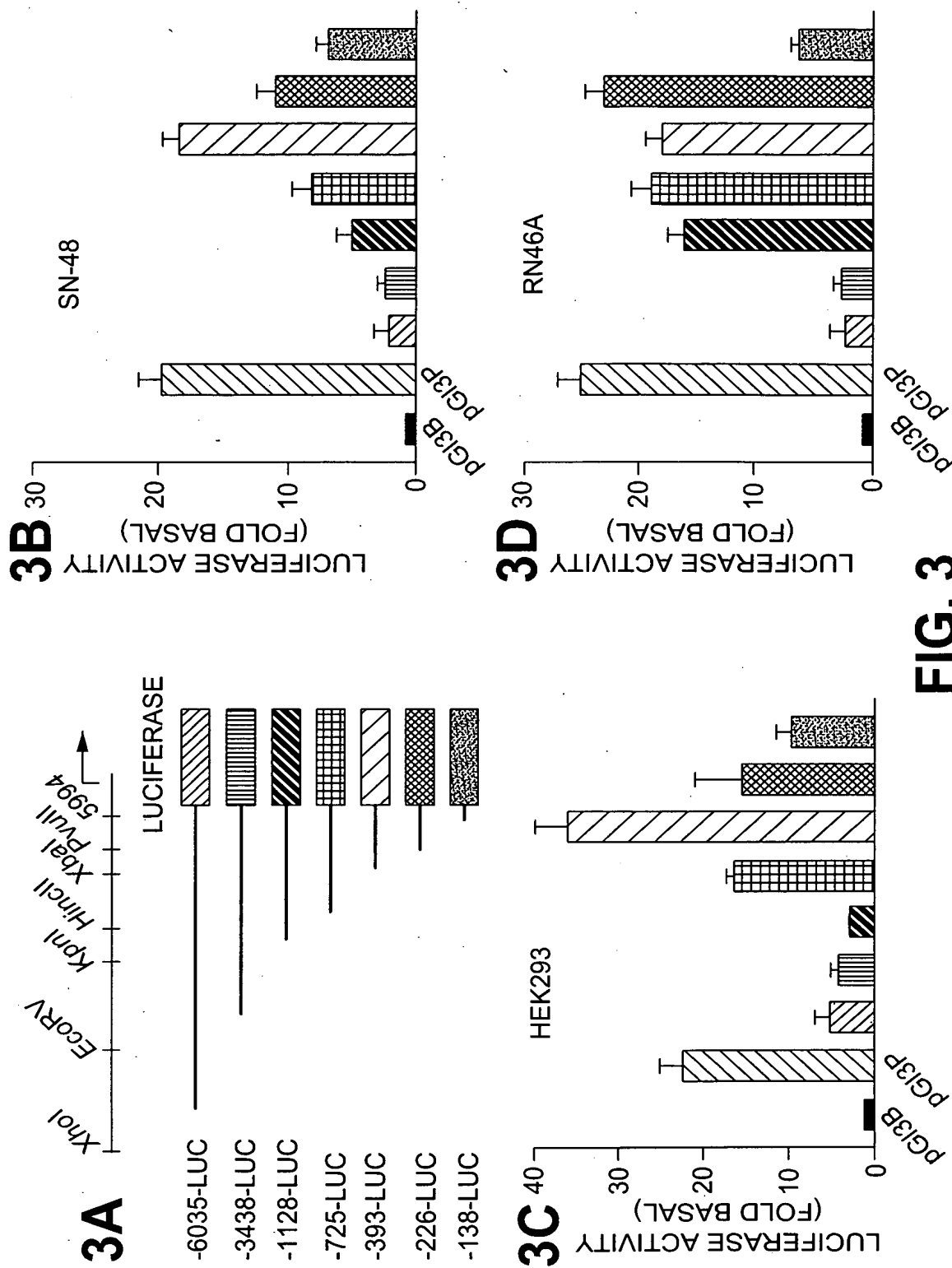


FIG. 3

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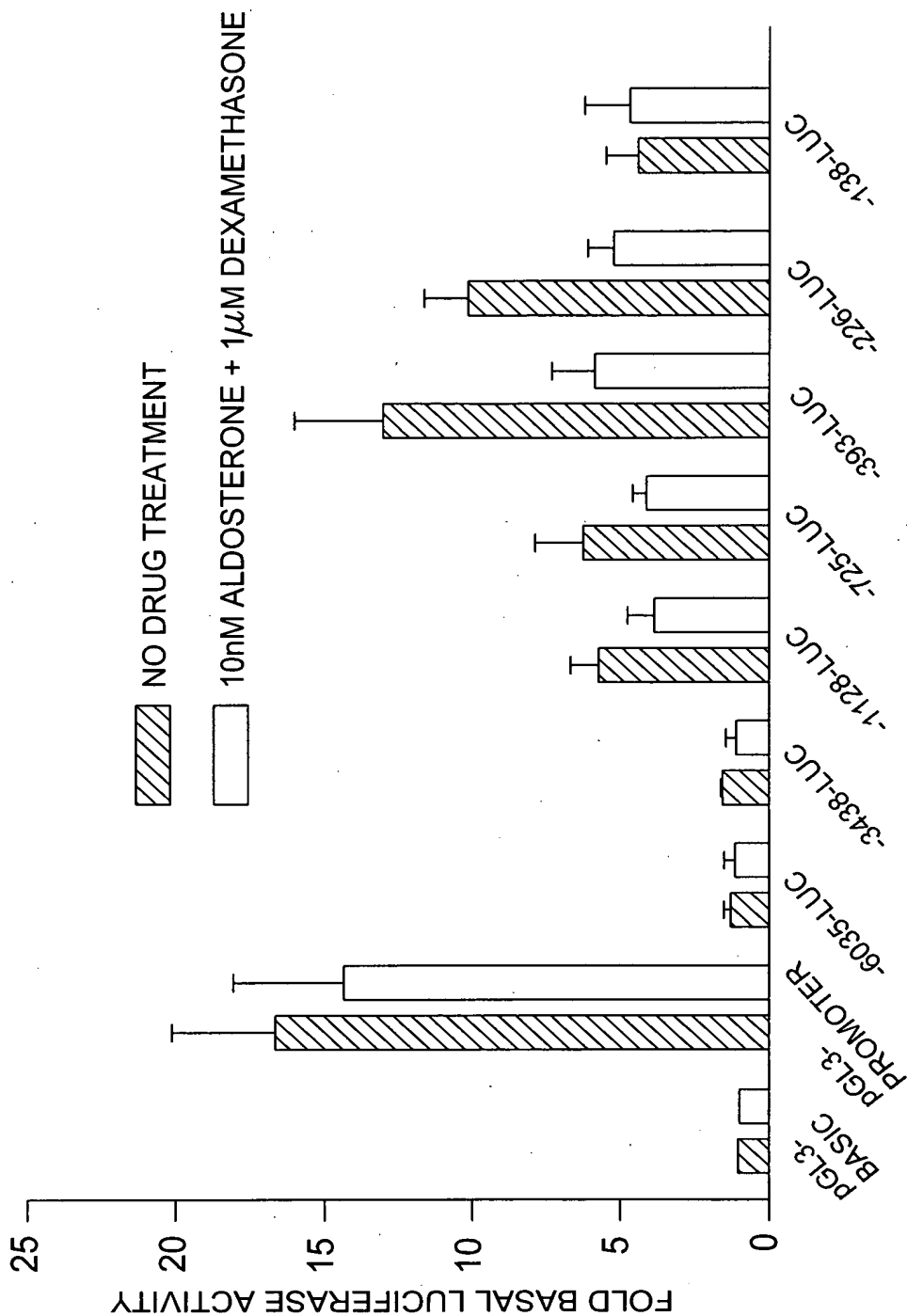


FIG. 4A

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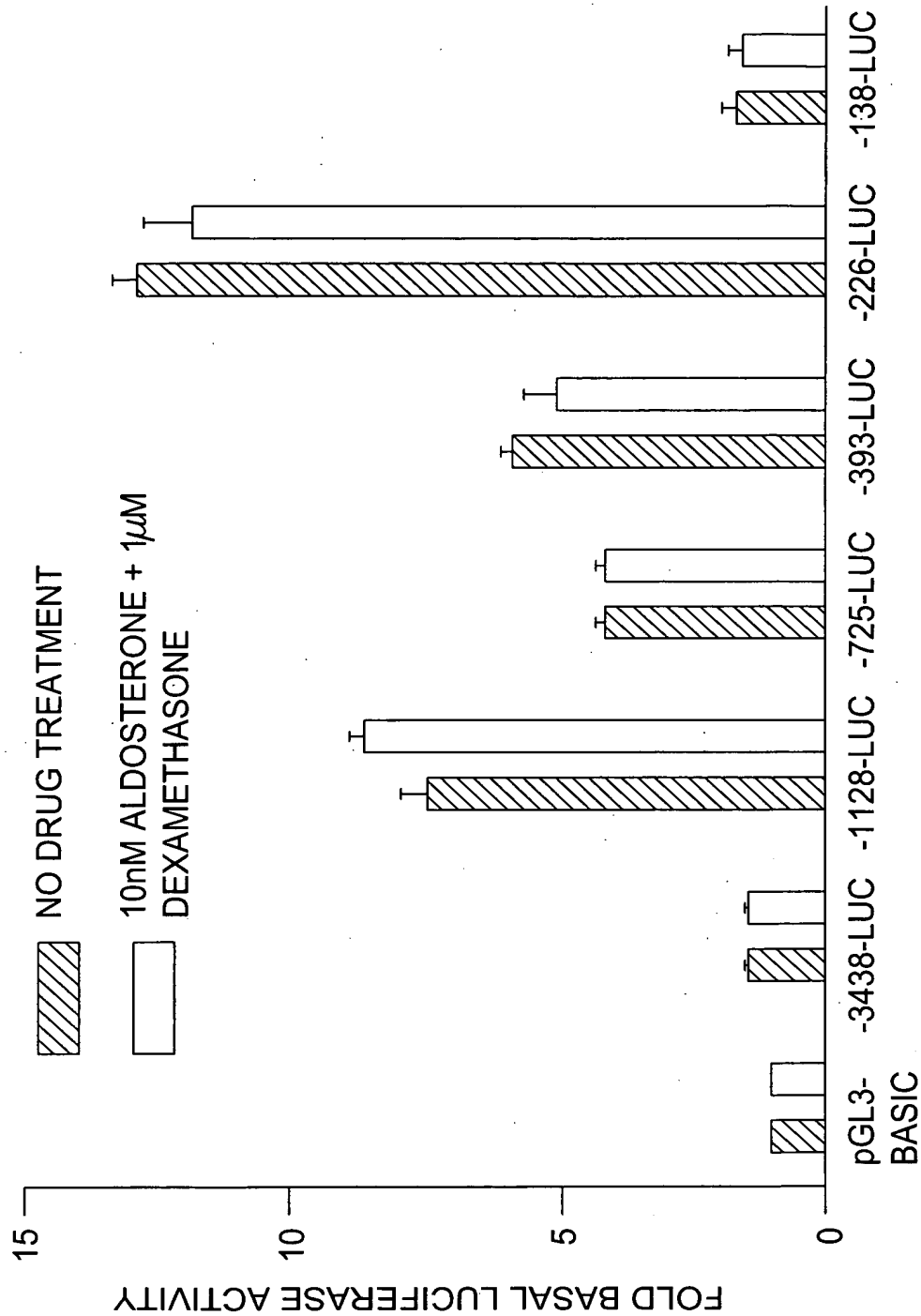


FIG. 4B

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Sheet 8 of 9 sheets

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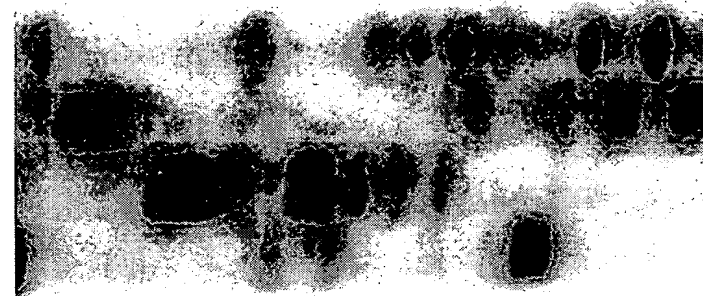
5C

G A T C



5B

G A T C



5A

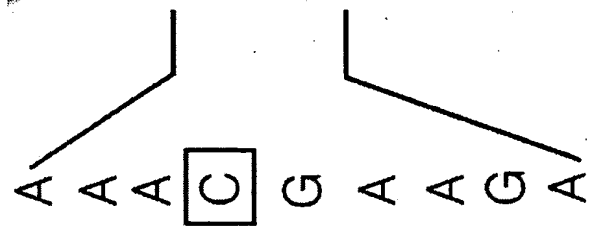
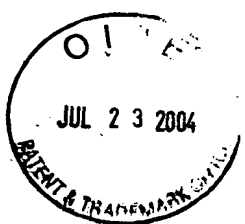


FIG. 5
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RN46A NUCLEAR EXTRACT
100X COLD SPECIFIC OLIGO
100X COLD NON-SPECIFIC OLIGO

-	+	+	+
-	-	+	-
-	-	-	+

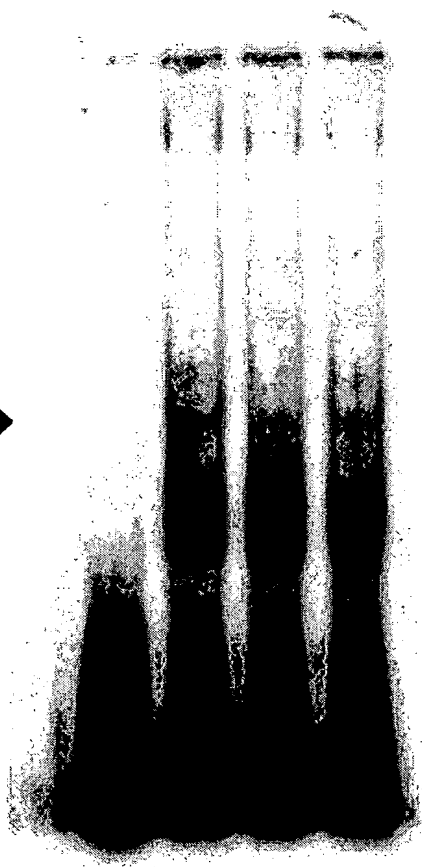


FIG. 6

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